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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,601	12/23/2003	Michael Scott Hebert	GEMS 0229 PA	1600
27256	7590	09/22/2006	EXAMINER	
ARTZ & ARTZ, P.C. 28333 TELEGRAPH RD. SUITE 250 SOUTHFIELD, MI 48034			KAO, CHIH CHENG G	
			ART UNIT	PAPER NUMBER
			2882	

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/707,601		HEBERT ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Chih-Cheng Glen Kao		2882	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 8-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 9-14 and 16-20 is/are rejected.
- 7) ☒ Claim(s) 5, 8 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Objections*

1. Claim 8 is objected to because of the following informalities, which appear to be minor draft errors including grammatical and/or lack of antecedent basis problems.

In the following format (location of objection; suggestion for correction), the following correction(s) may obviate the objection(s): (claim 8, line 4; deleting “and”) and (claim 8, lines 9-10; inserting - -and- - before “a plurality of mounting bores”).

For purposes of examination, the claim has been treated as such. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6, 9, 10, 13, 14, and 16-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Schleinkofer (US 4189658).

3. Regarding claims 1 and 13, Schleinkofer discloses an assembly comprising a target shaft (fig. 1, #8), an x-ray target element (fig. 1, #11) mounted to said target shaft (fig. 1, #8), a plurality of circumferential features (fig. 2, features occupied by #12 and 17-19) formed in said

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x-ray target element (fig. 3, #11), and at least one weight element (fig. 2, #12 or 17-19) adapted to be securable in a plurality of positions (fig. 2, via #21 for example) within one of said circumferential features (fig. 2, feature occupied by #12 or 17-19) such that said x-ray target element is balanced (abstract) around said target shaft.

4. Regarding claim 18, Schleinkofer discloses a method comprising placing a weight element (fig. 2, #12 or 17-19) within a circumferential feature (figs. 2 and 3, feature occupied by #12 or 17-19) formed onto an X-ray target element (fig. 3, #11), necessarily positioning said weight element (fig. 2, #12 or 17-19) in a position along said circumferential feature that balances said x-ray target element (abstract), and securing (fig. 3, via #25) said weight element to said circumferential feature.

5. Regarding claims 2, 14, and 19, Schleinkofer further discloses wherein one of said circumferential features comprises a circumferential groove (fig. 2, #21-24) formed in said x-ray target element (fig. 3, #11).

6. Regarding claim 3, Schleinkofer further discloses wherein one of said circumferential features (fig. 2, feature occupied by #12 or 17-19) is positioned around (i.e., nearby) a perimeter surface of said x-ray target element (fig. 1, #11).

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7. Regarding claim 4, Schleinkofer further discloses wherein one of said circumferential features (fig. 2, feature occupied by #12 or 17-19) is positioned around (i.e., nearby) an x-ray facing surface (fig. 3, surface of #11 facing up) of said x-ray target element (fig. 1, #11).

8. Regarding claim 6, Schleinkofer further discloses wherein one of said circumferential features comprises an entry port (fig. 2, via #21-24) formed in said circumferential feature (fig. 2, feature occupied by #12 or 17-19), said entry port allowing said at least one weight element (fig. 2, #12 or 17-19) to be inserted into said circumferential feature.

9. Regarding claims 9 and 16, Schleinkofer further discloses wherein one of said circumferential features comprises a circumferential securing elbow slot (fig. 2, #21-24), said at least one weight element including a securing elbow (figs. 2 and 3, elbow of #12 or 17-19 in slot #21-24) adapted to fit within said circumferential securing elbow slot (fig. 2, #21-24) and secure said at least one weight element (fig. 2, #12 or 17-19) within said circumferential feature.

10. Regarding claim 10, Schleinkofer further discloses wherein said circumferential securing elbow slot comprises a t-shaped slot (#21 or 23 as viewed in fig. 3).

11. Regarding claims 17 and 20, Schleinkofer further discloses wherein said feature comprises a circumferential flange element (fig. 3, section of #11 under #21 or 23) positioned on said x-ray target element (fig. 3, #11).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schleinkofer as applied to claim 9 above.

Schleinkofer discloses an assembly as recited above.

However, Schleinkofer fails to disclose wherein said circumferential securing elbow slot comprises a triangular slot.

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to include the assembly of Schleinkofer with a triangular slot, since such a modification would have only involved a mere change in the shape of a component. A mere change in shape is generally recognized as being within the level of ordinary skill in the art. One would have been motivated to make such a modification to more easily position the weight element into the feature.

13. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schleinkofer as applied to claim 2 above, and further in view of Barber (4,842,485).

Schleinkofer discloses the assembly as recited above.

However, Schleinkofer fails to disclose wherein at least one weight element comprises an expandable weight assembly including an expansion bore and an expansion screw, said

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expansion screw expanding said expandable weight assembly to secure said at least one weight element within a groove.

Barber teaches wherein at least one weight element comprises an expandable weight assembly (fig. 5, #15) including an expansion bore (fig. 5, #37) and an expansion screw (fig. 5, #27), said expansion screw expanding said expandable weight assembly to secure said at least one weight element within a groove (fig. 5, #13).

It would have been obvious, to one having ordinary skill in the art at the time of the invention was made, to include the assembly of Schleinkofer with the expandable weight assembly of Barber, since one would have been motivated to make such a modification for more easily inserting a weight element (fig. 3, via compression along the direction of “d”) as implied from Barber.

#### *Allowable Subject Matter*

14. Claims 5 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 8 would be allowable if amended to overcome the claim objections(s) set forth in this Office action. The following is a statement of reasons for the indication of allowable subject matter.

15. Regarding claim 5, prior art fails to disclose or fairly suggest an x-ray assembly, including wherein an x-ray target element comprises a central neck portion extending from an x-ray facing surface along an inner x-ray target diameter, one of a plurality of circumferential



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features formed onto said central neck portion, in combination with all the limitations in the claim.

16. Regarding claim 8, prior art fails to disclose or fairly suggest an x-ray assembly, including a circumferential feature comprising a flange element positioned around and protruding from a perimeter surface of an x-ray target element, and a plurality of mounting bores positioned along said flange element, at least one weight element securable within any of said plurality of mounting bores, in combination with all the limitations in the claim.

17. Regarding claim 15, prior art fails to disclose or fairly suggest an x-ray assembly, including wherein an x-ray target element comprises a central neck portion extending from an x-ray facing surface along an inner x-ray target diameter, a feature formed onto said central neck portion, in combination with all the limitations in the claim.

### ***Response to Arguments***

18. Applicant's arguments, see page 6, lines 20-21, and page 9, lines 22-23, filed June 21, 2006, with respect to the rejection(s) of claim(s) 1-6 and 8-20 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Schleinkofer.

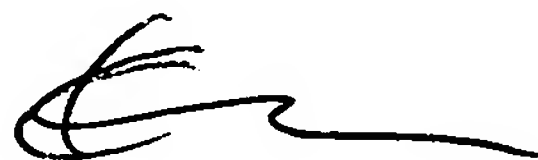


*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Cheng Glen Kao whose telephone number is (571) 272-2492. The examiner can normally be reached on M - F (9 am to 5 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Chih-Cheng Glen Kao  
Examiner  
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